

Epping Forest Yacht Club Severe Weather and Hurricane Preparedness Plan for the Marina Facilities

August 2009
(revised)

Severe weather and hurricane preparedness is a task that shall be conducted as an ongoing effort by all staff involved with the EFYC marina facility. It is expected that most severe weather impacting the EFYC marina will occur during the hurricane season from June 1 through November 30 annually, however strong storms can and do occur at all times of the year. The Epping Forest Yacht Club Severe Weather and Hurricane Preparedness Plan for Marina Facilities shall be reviewed periodically and updated as appropriate. The Harbormaster shall be responsible for the Severe Weather and Hurricane Preparedness Plan for the Marina Facilities.

The following precautions and suggestions are meant as guidelines only. The marina staff and boat owners contributing to the Plan assume no responsibility for the effectiveness of the information and suggestions provided in the Plan. The suggestions and information included in the Plan are intended to promote safety, preserve life and protect property within the marina, but it is the boat owner's responsibility to take precautionary measures to protect their property when severe weather threatens. As described below, EFYC will take reasonable measures to e-mail tenants and provide updates during severe weather, but it is ultimately each individual tenant and boat or yacht owner's responsibility to monitor weather conditions and remain updated when severe weather threatens.

Annual review and activities prior to Hurricane Season

- Review with staff general severe weather terms and definitions.
 - Hurricane Season
 - Severe Weather Advisory
 - Small Craft Warnings
 - Tropical Depression
 - Tropical Storm
 - Hurricane
 - Tropical Storm Watch
 - Tropical Storm Warning
 - Hurricane Watch
 - Hurricane Warning
 - Storm Surge

- Staff shall review the Epping Forest Yacht Club Severe Weather and Hurricane Preparedness Plan for Marina Facilities and the Epping Forest Yacht Club Annual Hurricane Memo.
- Instruct marina staff on expectations as to their duties and when they are to report during severe weather. Staff members have family and property of their own to consider in addition to their EFYC marina duties.
 - Review evacuation and escape routes
 - Review storm surge flooding maps for the area
 - Review emergency medical treatment facilities in the area.
- Review with staff the effects of wind driven water and waves, storm surge and heavy rain. The marina facilities and office may flood in major storms. The gardens may flood. Docks may float above the seawall or off piles.
- Review the use of the “crash cart” battery, chargers, pumps, equipment and the gasoline pumps at the mansion that could be used as emergency pumps.
- Review use of utility shut off points:
 - Water to docks and office
 - Electrical to docks and office
 - Hot water heater
 - Lift pump for sewage
- Review slip tenant documentation for valid and current certificates of insurance and slip rental contracts.
- Provide new slip tenants a copy of the Epping Forest Yacht Club Severe Weather and Hurricane Preparedness Plan for Marina Facilities and notice of EFYC severe weather policy with regard to boats and yachts in the marina.
- Encourage all slip tenants to review and update individual plans to secure their boat or yacht during severe weather. Request that a courtesy copy of individual plans be provided to the Harbormaster.
- Inventory and restock storm related stores, to include:
 - Wood window coverings for the Boathouse window(s)
 - Spare dock lines for boats not adequately secured
 - Flashlights and spare batteries for each
 - Caution tape to tape off any dangerous areas post storm

Ongoing Activities and Efforts, June 1 through November 30 each year

- Keep on hand and/or functional a minimum of the following*:
 - Marine radios; 2 handheld and one base in working order.
 - 5 each five gallon cans of gasoline (25 gallons, minimum) in gasoline shed at the upper parking lot.
 - Yacht club vessels shall have fuel tanks half full or greater at all times.
 - 4 cases of bottled water at the marina.
 - 2 each full 20 lb. LPG gas (40 lb., minimum) bottles for the grill.
 - Grill igniters; a minimum of 2 in good working order.
 - 30 bags of ice in the ice chest.

** Note: items are for use of EFYC Marina at the Harbormaster’s discretion; individual owners should secure individual supplies as necessary*

- Post at the Harbormaster’s office weather reports of all Tropical Depressions or other significant weather features that could affect EFYC.
- The first week of each month review and/or update following:
 - Marina slip tenant rosters with contact phone numbers, addresses and e-mail addresses.
 - Three or more digital photos of each dock area documenting the location and condition of boats and yachts moored at EFYC.
 - Check inventory of storm related stores.
 - Check condition of the “crash cart” and related equipment.

Epping Forest Yacht Club policy for securing boats or yachts when severe weather occurs around or near the EFYC Marina

The EFYC marina does not have sufficient staffing and equipment to properly secure all vessels at the facility. It is the boat or yacht owner’s responsibility to acquire the necessary equipment and take precautionary measures necessary to protect life and property when severe weather threatens. The proper selection and use of dock (mooring) lines is the most critical factor in securing a vessel in a slip.

Accepted standards based on manufacturer recommendations and industry best practices for selecting and installing dock (mooring) lines are as follows:

- **Dock lines should be braided Nylon or three strand Nylon in good condition free of chafe, knots or frays and no more than three years in use.**
- **The minimum diameters of dock lines are as follows:**
 - **32’ and smaller vessels 1/2” diameter lines**
 - **33’ through 44’ vessels 5/8” diameter lines**
 - **45’ and larger vessels 3/4” diameter lines**
- **During significant storm events best practices include:**
 - **Dock lines “doubled” such that should one line break or fail, the second will remain in place. A well moored vessel will have port and starboard bow and stern as well as fore and aft spring lines.**
 - **Dock lines fitted with chafe gear when ran through chocks and other wear points.**
 - **At least one set of the “doubled” lines be one size larger than the minimum diameter listed above or the largest size the vessel’s cleats will accept.**
 - **Use of fenders, fender boards and other devises to protect the vessel from coming in contact with adjacent boats, docks or piles.**

As time and staff duties allow, marina staff will offer reasonable assistance to boat or yacht owners as long as it does not involve a threat of physical harm to the staff.

The staff may adjust dock lines, add dock lines, chafe gear and remove deck or dock equipment as necessary to protect property. The boat or yacht owner will be charged a reasonable fee for this service.

EFYC highly recommends and encourages slip tenants to develop a comprehensive written plan to secure their boat and yachts during severe weather. A resource for developing such plans is the Hurricane Manual for Marine Interests as published by the Florida Inland Navigation District (FIND). Copies may be obtained from the Harbormaster while supplies last, from FIND at (561) 627-3386 or online at <http://www.aicw.org/hurricane/hurricane-manual.pdf>. The Harbormaster and marina staff will assist boat and yacht owners in the development of an individual plan intended to preserve life and property. However, it is the owner's responsibility to develop a unique plan for their boat or yacht. EFYC assumes no responsibility for the effectiveness of an owner's plan.

An owner's plan may be developed in a two page document. The first page should list the boat information (name, type, size, make, etc.), contact information for the owner and contact information for an alternative person(s) should the owner not be available (boat buddy). Information about the location on the boat of items such as additional dock line, fenders and chafe gear is also helpful. Insurance carrier contact information would be helpful. The second page should include a sketch or diagram of the boat and dock illustrating the number, location and attachment of dock lines, fenders and chafe gear.

EFYC requests slip tenants provide a courtesy copy of individual plans to the Harbormaster to be kept on file as reference should severe weather threaten. Slip tenants are also encouraged to provide the EFYC marina a set of keys to the boat or yacht should emergency access be necessary. Both the plan and the keys will be kept secured and confidential.

Efforts when a Tropical Storm Watch affecting EFYC marina has been issued

A Tropical Storm Watch indicates that severe weather with distinct circulation and sustained winds between 39 mph and 73 mph threatens to strike the area within 36 hours.

- Review ongoing preparedness activities as listed above.
- Alert all staff as to the possibility of a severe weather event and outline the responsibility of each staff member. Instruct staff to execute personal plans and take care of family and property immediately then be prepared to attend to marina duties if the tropical storm is expected to strike.
- Inform the Administration Office phone receptionist of the situation and keep updated so as to be able to respond to member phone inquiries.
- Attempt to notify via e-mail slip tenants with e-mail addresses on file of a possible severe weather event and encourage them to secure their boat or yacht immediately.
- Examine and secure all EFYC boats, sailboats, docks and equipment including trash cans, tables and chairs, etc. Remove all flags from flag poles.
- Continue to monitor weather reports and Advisories.

Efforts when a Tropical Storm Warning affecting EFYC marina has been issued.

A Tropical Storm Warning indicates that severe weather with distinct circulation and sustained winds between 39 mph and 73 mph is expected to strike the area within 24 hours.

- **Efforts if sustained winds are predicted to be 49 mph or less.**
 - Inform the Administration Office phone receptionist of the situation and keep updated so as to be able to respond to member phone inquiries.
 - Attempt to notify via e-mail slip tenants with e-mail addresses on file of a probable severe weather event and again encourage them to secure their boat or yacht immediately. Inform them the marina will close to all traffic when a Small Craft Warning is issued for the St. Johns River (along with the Tropical Storm Warning).
 - As time and available resources allow, examine boats and yachts and adjust or add dock lines as appropriate. Remove unsecured equipment or materials from boats, yachts, or docks. Keep notes of time and stores used on each vessel requiring attention. Attempt to notify individual owners of any significant problems.
 - When Small Craft Warnings are issued for the St. Johns River along with a Tropical Storm Warning, declare the marina closed to all traffic and allow boat owners to cross tie to docks or pilings. Boat passage to and from the marina may be physically restricted at this time due to the cross ties and hurricane preparation activities. Attempt to notify slip tenants of marina closure via e-mail.
 - Continue to monitor weather reports and Advisories.
 - Release nonessential staff no later than 12 hours before the predicted storm arrival.

- **Efforts if sustained winds are predicted to be 50 mph or more.**
 - Complete all above
 - Install the wood covers on the Boathouse large window(s).

Efforts during a Tropical Storm affecting EFYC marina.

- If safe and as time and available resources allow, examine boats and yachts and adjust dock lines as appropriate.
- Should winds reach 60 mph sustained, declare the marina closed to all persons and turn off all electrical and water services to the marina. Evacuate all persons to a safe shelter.
- Continue to monitor weather reports and Advisories.
- Take no action that would endanger life.

Efforts when a Hurricane Watch affecting EFYC marina has been issued.

A Hurricane Watch indicates that severe weather with distinct circulation and sustained winds of 74 mph or greater threatens to strike the area within 36 hours.

- Review ongoing preparedness activities as listed above.
- Alert all staff as to the possibility of a hurricane and outline the responsibility of each staff member. Instruct staff to execute personal plans and take care of family and property immediately then be prepared to attend to marina duties if the hurricane is expected to strike.
- Inform the Administration Office phone receptionist of the situation and keep updated so as to be able to respond to member phone inquiries.
- Notify via e-mail slip tenants with e-mail addresses on file of a possible hurricane and encourage them to secure their boat or yacht immediately. Inform them the marina will close once a Small Craft Warning is issued for the St. Johns River (along with the Hurricane Watch).
- Encourage owners of jet skis, wave runners and small boats to remove them from the dry storage dock or secure them in a wet slip if available! They will be in grave danger on the dry dock during high water with wind driven waves.
- Examine and secure all EFYC owned sailboats, docks and equipment including trash cans, tables and chairs, etc. Move EFYC owned power boats to trailers and park in upland lot away from overhanging trees. Remove all flags from flag poles.
- Install the wood covers on the Boathouse large window(s)
- When Small Craft Warnings are issued for the St. Johns River along with a Hurricane Watch, declare the marina closed to all traffic and allow boat owners to cross tie to docks or pilings. Boat passage to and from the marina may be physically restricted at this time due to the cross ties and hurricane preparation activities. Attempt to notify slip tenants of marina closure via e-mail.
- As time and available resources allow, examine boats and yachts and adjust or add dock lines as appropriate. Remove unsecured equipment or materials from boats, yachts, or docks. Keep notes of time and stores used on each vessel requiring attention. Notify individual owners of any significant problems.
- Continue to monitor weather reports and Advisories.

Efforts when a Hurricane Warning affecting EFYC marina has been issued.

A Hurricane Watch indicates that severe weather with distinct circulation and sustained winds of 74 mph or greater threatens to strike the area within 24 hours.

- Inform the Administration Office phone receptionist of the situation and keep updated so as to be able to respond to member phone inquiries.

- Attempt to notify via e-mail slip tenants with e-mail addresses on file of a probable severe weather event and again encourage them to secure their boat or yacht immediately. Inform them the marina is closed to all traffic and boat and yacht owners may cross tie to docks or pilings even if it restricts boats or yachts from entering or leaving.
- Prepare Harbormaster's Office for possible flooding
 - Tenant files with slip rental agreements, owner's severe weather plans, other documents, boat keys along with computer(s) and other important files will be moved to the Administration office in the Carriage House.
 - Inventory, general records and office equipment are to be moved to the upper floor office.
 - Elevate materials and equipment on the lower floor to prevent water damage from flooding.
- If safe and as time and available resources allow, examine boats and yachts and adjust dock lines as appropriate.
- Release nonessential staff no later than 12 hours before the predicted storm arrival.

Efforts during a Hurricane affecting EFYC marina.

- If safe and as time and available resources allow, examine boats and yachts and adjust dock lines as appropriate.
- Once winds reach 60 mph sustained, declare the marina closed to all persons and turn off all electrical and water services to the marina. Evacuate all persons to a safe shelter.
- Continue to monitor weather reports and Advisories.
- Take no action that would endanger life.

Efforts Post Storm

Post storm activities shall be dictated by severity of the damage that occurred. The marina shall be closed to all persons other than authorized staff until preliminary damage assessments are completed and the Harbormaster declares the marina area safe and the General Manager authorizes it to be reopened.

- All staff are to be aware of the many dangers a storm presents
 - Proper protective clothing shall be worn
 - Staff attempting to return to the marina may encounter storm related problems in transit.
- The Harbormaster and Administrative staff will establish a communication process so slip tenants may inquire as to the condition of the marina and specific vessels. If operational, e-mail notification will be made to all slip tenants.
- The Harbormaster shall review the facilities to determine damage to and safety of the facilities.

- Physical condition and safety of the docks and structures

- Condition and safety of the utilities
 - Electrical
 - Water
- Photographs shall be taken of damage and condition of the marina and the vessels in the marina.
- Prepare a written assessment of the damaged to accompany photos
- The Harbormaster shall consult with the General Manager and they shall jointly determine actions to be taken with regard to the following:
 - When and under what conditions shall the marina be reopened
 - What immediate repairs should be accomplished
 - Action plan to restore marina operations and resume general use